

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

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PCT

NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of Mailing
(day/month/year)

10 OCT 2003

Applicant's or agent's ~~record:~~ file reference

09765-015WO1

IMPORTANT NOTIFICATION

International application No.

International filing date (day/month/year)

Priority date (day/month/year)

PCT/US01/41363

13 July 2001 (13.07.2001)

13 July 2000 (13.07.2000)

Applicant

ITA SOFTWARE, INC.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the ~~Initials:~~ IPEA/US

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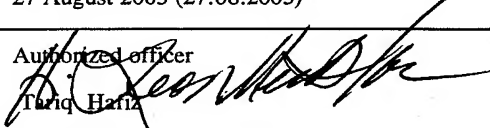
BOSTON OFFICE

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 09765-015WO1	FOR FURTHER ACTION		See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/US01/41363	International filing date (day/month/year) 13 July 2001 (13.07.2001)	Priority date (day/month/year) 13 July 2000 (13.07.2000)	
International Patent Classification (IPC) or national classification and IPC IPC(7): G06F 17/60 and US Cl.: 705/5			
Applicant ITA SOFTWARE, INC.			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u> </u> sheets.</p> <p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of report with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application 			
Date of submission of the demand 11 February 2002 (11.02.2002)		Date of completion of this report 27 August 2003 (27.08.2003)	
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230		Authorized officer  Tareq Hamza Telephone No. 703-305-3900	

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US01/41363

I. Basis of the report1. With regard to the **elements** of the international application:*

- ☒ the international application as originally filed.
- ☒ the description:
pages 1-18 as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.
- ☒ the claims:
pages 19-22, as originally filed
pages NONE, as amended (together with any statement) under Article 19
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.
- ☒ the drawings:
pages 1-10, as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.
- ☐ the sequence listing part of the description:
pages NONE, as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages NONE
- ☐ the claims, Nos. NONE
- ☐ the drawings, sheets/fig NONE

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

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International application No.
PCT/US01/41363**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. STATEMENT**

Novelty (N)	Claims <u>2,3,7,11-16,18-20</u>	YES
	Claims <u>1,4-6, 8-10,17</u>	NO
Inventive Step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-20</u>	NO
Industrial Applicability (IA)	Claims <u>1-16</u>	YES
	Claims <u>17-20</u>	NO

2. CITATIONS AND EXPLANATIONS

Please See Continuation Sheet

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Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Claims 1,4-10 and 17 lack novelty under PCT Article 33(2) as being anticipated by Lynch et al (US 6,018,715).

As per claims 1, 17, Lynch et al 715' discloses:

A competitive, availability prediction system for predicting relative, competitive availability of seating on an airline flight.../A method of predicting relative, competitive availability of seating...(Abstract, lines 7-20):

An availability predictor that predicts seating availability.../predicting seating availability...(Abstract, lines 1-8, lines 11-20, Col. 6, lines 7-10);

An availability system that produces an actual availability response.../providing an actual availability response...(Col 7, lines 17-29, where the agency provides the actual availability and system 10 produces the response);

Decision logic that compares the predicted answer from the availability predictor and the potential answer from the availability system to establish a decision with respect to actual availability.../comparing the predicted answer...(Col. 8, lines 40-41 and 47-49, where the competitor includes at least a travel agency).

As per claim 4 Lynch et al 715' discloses:

Wherein the decision logic determines whether the prediction from the availability predictor indicates that a competitor is in a more favorable or less favorable competitive position...(Col. 3, lines 21-28, Col. 7, lines 42-50).

As per claim 5 Lynch et al 715' discloses:

Wherein the decision as to an actual availability answer is based on the message from the decision logic...(Col. Col. 6, lines 7-28).

As per claim 6 Lynch et al 715' discloses:

Wherein the message from the decision logic can have a plurality of states...(Col. 6, lines 10-25).

As per claim 7 Lynch et al 715' discloses:

Wherein one of the states includes a neutral state that does not tend to modify the potential answer received...Col. 6, lines 15-16).

As per claim 8 Lynch et al 715' discloses:

Wherein one of states biases a potential answer towards answering that seat is available...(Col. 6, line 14).

As per claim 9 Lynch et al 715' discloses:

Wherein one of states biases a potential answer towards answering that seat is not available...(Col. 6, lines 14-15).

As per claim 10 Lynch et al 715' discloses:

Wherein state depends upon the relative competitive position of the competitor represented by the availability predictor...(Col. 6, lines 7-14).

Claims 2, 3, 18 and 19 lack an inventive step under PCT Article 33(3) as being obvious over Lynch et al (US 6,018,715) in view of Lynch et al (US 5,839,114).

As per claims 2, 3, 18, 19, Lynch et al '715 fails to disclose the following, however Lynch et al '114 discloses:

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Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Wherein the decision of the decision logic is a bias that determines whether the potential answer should be modified.../Modifying logic that is responsive to the availability response from the availability system and from the bias from the decision logic to modify the actual availability answer in accordance with the bias.../wherein comparing produces a decision that is a bias that determines whether the potential answer should be modified.../modifying the actual availability...(Col. 7, line 66-Col. 8, line 26).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to determine whether the potential answer should be modified based upon the relative competitive position of the competitor represented by the availability predictor and to actually modify the actual availability answer with the motivation of providing a fair and balanced travel arrangement through updating and making changes to the travel plan.

Claims 11-16 and 20 lack an inventive step under PCT Article 33(3) as being obvious over Lynch et al (US 6,018,715).

As per claims 11, 20, Lynch et al '715 fails to disclose the following:

Wherein the decision logic determines whether the competitor's available booking codes are at a lower price.../determining whether the competitor's available booking codes are at a lower price...

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to determine whether the competitor's available booking codes are at a lower price than those which the availability system indicates the user of the system can offer with the motivation of accessing the travel arrangement that would be cheapest for the customer.

As per claims 12, 13, Lynch et al '715 fails to disclose the following:

Wherein if the competitor's available booking codes are not at a lower price, then the system can return a bias towards making the seat unavailable.../wherein if the competitor's available booking codes are not at a lower price, then the system can test whether the original query was for a low cost fare and return a bias towards making the seat not available...

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to return a bias towards making a seat unavailable if the booking codes are not at a lower price with the motivation of not going outside of a price range and subjecting the customer to unnecessary costs.

As per claims 14, 15, Lynch et al '715 fails to disclose the following:

Wherein if the competitor's available booking codes are at a lower price than those being offered by the user of the system, the system returns a bias towards making the seat available.../wherein if the competitor's available booking codes are at a lower price than those being offered by the user of the system, the system determines whether the query was for a high cost fare, and returns a bias towards making the seat available if for a high cost fare...

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to make seating available if booking codes are at a lower price with the motivation of providing the customer with the best rates for a travel arrangement.

As per claim 16, Lynch et al '715 discloses:

Wherein the messages that are returned change the availability message from the availability system...(Col. 6, lines 25-34).

Claims 17-20 lack industrial applicability as defined by PCT Article 33(4) because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim, the recite process must somehow apply, involve, use, or advance the technological arts.

In the present case, independent claim 17 is directed towards predicting relative, competitive availability of seating on an airline flight. Claim 17 recites the steps of "predicting seating availability on a competitive flight", "providing an actual availability response for a flight" and "comparing the predicted answer from the availability predictor and the potential answer from the availability system to establish a decision with respect to actual availability". These steps represent mere ideas in the abstract and therefore are found to be non-statutory subject matter. The claims that depend on independent claim 17 are therefore found to be non-statutory as well.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In this case, claim 17 produces a useful, concrete, and tangible result by disclosing the "comparing the predicted answer from the availability predictor and the potential answer from the availability system to establish a decision with respect to actual availability" step. However, since claims 17-20 are not within the technological arts, these claims are still non-statutory.